# RANGE EXTENSION AND BEHAVIOURAL OBSERVATIONS FOR DOLESCHALLIA BISALTIDE (CRAMER) (LEPIDOPTERA: NYMPHALIDAE: NYMPHALINAE)

# T.J. SHAKESPEARE, Z.J. SHAKESPEARE and T.P. SHAKESPEARE

158b Gaudrons Road, Sapphire Beach, NSW 2450 (Email: ThomasShakespeare@gmail.com)

### Abstract

Records of a southern extension of range are provided for *Doleschallia bisaltide* (Cramer) collected in and around Coffs Harbour, New South Wales. Previously unreported behaviour is also noted.

# Introduction

Between December 2007 and May 2009, multiple specimens of *Doleschallia bisaltide* (Cramer) (Fig. 1) were captured in and around Coffs Harbour, northeastern New South Wales. Specimens were also observed frequenting a garden in Sapphire Beach, Coffs Harbour on a daily basis during February and April 2008 and again between February and April 2009. A number of specimens were captured at this location, which borders the Orara East State Forest, at an altitude of 100 m and 2 km west of the coastline. Previously unreported behaviour was also observed at this location.



Fig. 1. Doleschallia bisaltide at rest on 6 m high canopy of Eucalyptus sp



Fig. 2. Locale at Sapphire Beach and net extension used to capture specimens in canopy.

#### Observations

## NYMPHALIDAE

Doleschallia bisaltide (Cramer)

Specimens were observed at numerous locations around Coffs Harbour, New South Wales. These locations include the coastal Moonee Beach Nature Reserve, Sapphire Beach bordering the Orara East State Forest, at various locations in Bonville, and bordering the Bongil Bongil National Park south of Coffs Harbour. These records extend the known range of the species approximately 90 km further south than the previously reported locality of Grafton (Braby 2000, Common and Waterhouse 1981). Specimens were observed most commonly between February and April in both 2008 and 2009.

At Sapphire Beach, the species' status, using the system suggested by Braby (2004), was local but common. At the other locations the status was local and rare. Specimens at Sapphire Beach could be observed daily between 1400 and 1630h perched at a height of 6 m on the west-facing canopy of several Eucalyptus spp, or occasionally on power lines. Specimens were always observed in the same part of the canopy, at the same time each day and in full sun. At other times or when cloudy, specimens were rarely observed. Specimens were almost always perched on the upper side of the leaf, head down, with wings at 45° (Fig. 1). The exception was that specimens observed on power lines always rested with their wings fully open at 180°. When disturbed by passing Lepidoptera, specimens frequently followed the passing species, then flew rapidly over the canopy to eventually alight on the same or nearby leaf. In the same garden, one specimen was observed at 0800h flying rapidly to alight briefly on flowers of various species, in full sun. On occasion, at dusk (around 1800h), specimens could also be observed rapidly circling a large Eucalyptus sp. at heights between 6 and 12 m. All specimens captured and observed appeared to be in perfect condition. Specimens resting on the canopy were easily caught with an insect net attached to a pool cleaning pole (Fig. 2), carefully approaching the adult from behind. Adults were rarely disturbed before being netted using this technique.

### References

BRABY, M.F. 2000. Butterflies of Australia: their identification, biology and distribution. CSIRO Publishing, Collingwood;  $xx+976\,\mathrm{pp}$ .

BRABY, M.F. 2004. The complete field guide to butterflies of Australia. CSIRO Publishing, Collingwood; xx + 340pp.

COMMON, I.F.B. and WATERHOUSE, D.F. 1981. *Butterflies of Australia*. Revised Edition. Angus and Robertson, Sydney; xiv + 682 pp.